

ISO Premium Retrievable Bridge Plug

Creates qualified barrier for isolating the wellbore without the need of a nipple profile

Applications

- Packer setting and completion installation
- Contingent plugging of completions with damaged nipples
- Temporary zonal isolation/plugging
- Hanging completion accessories within tubing string
- Temporary well suspension
- Pressure testing of production tubing/packer setting
- Wellhead repair and replacement

Features and Benefits

- The ISO premium retrievable bridge plug tests to ISO 14310 V3 standards for performance reliability as a well barrier.
- Representative samples of ISO premium retrievable bridge plugs test to ISO 14310 V0 standards.
- Equalization is achieved by means of an internal sleeve that is retrieved by shifting a sleeve down to equalize the pressure and then sheared up to release.
- The large equalization flow area mitigates potential of debris plugging in overbalanced situations.
- A debris-exclusion system, which prevents debris from contaminating the plug components, enables plug retrieval from the wellbore.
- The low-stress slip system provides efficient anchoring and is suited to mature wellbores that may have corrosion or wall loss. This slip system eliminates concern of any imposed tubing damage resulting from high differential loading.
- The slip mechanism, which is located below the packing element, is retained on retrieval.
- The retrievable bridge plug has internal/external fishing necks that provide flexibility during recovery.
- The ISO premium retrievable bridge plug is compatible with industry-recognized setting/pulling tools and is available in 2 3/8-in. to 7-in. nominal sizes so that all routinely encountered tubing sizes can be serviced from standard inventory.
- Minimum pressure rating of 5,000 psi (345 bar) provides high-integrity sealing and minimizes loss-of-contaminant risk and associated health, safety, and environmental (HSE) risk.



The ISO retrievable bridge plug is a high-performance plug that temporarily isolates the upper wellbore from the lower wellbore during stimulation operations.



ISO Retrievable Bridge Plug

Tool Description

The Weatherford ISO retrievable premium bridge plug sets on a conventional e-line, slickline, tubing, or coiled tubing (CT) to temporarily isolate the wellbore. The elastomeric packing element provides an efficient seal that holds pressure from above and below while protecting the bi-directional, low-stress slip system from debris contamination. The compact plug enables easy retrieval on tubing, CT, or slickline with a standard GS retrieval tool. An external fishing neck is incorporated into the design as an alternative retrieval method. Once the retrieval tool engages the top of the plug, jarring down shears an equalizing valve that locks into the *open* position. Straight pull releases the plug, and a release-retention system maintains run-in diameter of the plug for easy removal from the wellbore.

Specifications

Casing/Tubing			Max. OD	To Pass Restriction	Length	Temp. Rating	ISO	Pressure Rating Above	Pressure Rating Below
Size	Weight	ID Range							
2-7/8 in. (73 mm)	6.4 – 6.5 lb/ft (9.6 – 9.7 kg/m)	2.37 – 2.49 in. (60.25 – 63.32 mm)	2.28 in. (57.91 mm)	2.31 in. (58.67 mm)	59.2 in. (1,503.68 mm)	230 °F (110 °C)	V3	5,000 psi (35 MPa)	5,000 psi (35 MPa)
	8.6 – 8.7 lb/ft (12.8 – 13 kg/m)	2.27 – 2.28 in. (60.25 – 63.32)	2.16 in. (54.86 mm)	2.19 in. (55.63 mm)		300 °F (150 °C)	V3	3,000 psi (21 MPa)	3,000 21
3-1/2 in. (88.9 mm)	9.2 – 9.3 lb/ft (13.7 – 13.9 kg/m)	2.93 – 3.06 in. (74.37 – 77.75)	2.72 in. (69.09 mm)	2.75 in. (69.85 mm)	71.60 in. (1,818.64 mm)	275 °F (135 °C)	V3	5,000 psi (35 MPa)	5,000 psi (35 MPa)
4-1/2 in. (114.3 mm)	11.6 – 15.1 lb/ft (17.3 – 22.5 kg/m)	3.78 – 4.03 in. (96.01 – 102.31 mm)	3.65 in. (92.71 mm)	3.69 in. (93.68 mm)	71.71 in. (1,821.43 mm)	275 °F (135 °C)	V0	5,000 psi (35 MPa)	5,000 psi (35 MPa)
5 in. (127 mm)	18 lb/ft (26.8 kg/m)	4.19 – 4.36 in. (106.43 – 110.74 mm)	4.12 in. (104.64 mm)	4.15 in. (101.60 mm)	71.71 in. (1,821.43 mm)	275 °F (135 °C)	V3	5,000 psi (35 MPa)	5,000 psi (35 MPa)
	20.3 – 23.2 lb/ft (30.3 – 34.6 kg/m)	3.94 – 4.27 in. (100.13 – 108.56 mm)	3.85 in. (97.66 mm)	3.86 in. (98.43 mm)	76.2 in. (1,935.48 mm)	300 °F (150 °C)	V3		
5-1/2 in. (139.7 mm)	15.5 – 17 lb/ft (23.0 – 25.5 lb/ft)	4.63 – 4.98 in. (117.48 – 126.37 mm)	4.53 (115.06 mm)	4.56 in. (115.87 mm)	74.83 in. (1,900.68 mm)	275 °F (135 °C)	V0	5,000 psi (35 MPa)	5,000 psi (35 MPa)
	17 – 20 lb/ft (25.5 – 30.0 kg/m)	4.69 – 4.87 in. (119.23 – 123.62 mm)	4.45 in. (113.03 mm)	4.46 in. (113.67 mm)	74.83 in. (1,900.68 mm)	212 °F (100 °C)	V3	5,000 psi (35 MPa)	5,000 psi (35 MPa)
	23 – 26 lb/ft (34.5 – 38.6 kg/m)	4.44 – 4.77 in. (112.78 – 121.03 mm)	4.28 in. (108.71 mm)	4.31 in. (109.52 mm)	74.83 in. (1,900.68 mm)	275 °F (135 °C)	V3	5,000 psi (35 MPa)	5,000 psi (35 MPa)
7 in. (177.8 mm)	29 – 38 lb/ft (43.2 – 56.5 kg/m)	5.80 – 6.25 in. (147.29 – 158.80 mm)	5.72 in. (145.29 mm)	5.75 in. (146.05 mm)	94.87 in. (2,409.70 mm)	275 °F (135 °C)	V0	5,000 psi (35 MPa)	5,000 psi (35 MPa)

- Elastomers are Viton for V3 and V0 plugs, sizes 2-7/8 through 7 in.
- Class of service is Nitrile for V3 and V0 plugs, sizes 2-7/8 in. through 7 in.
- Material is 4140/4145 (18-22 HRC) for V3 and V0 plugs, sizes 2-7/8 in. through 7 in.
- Plugs with high pressure ratings are available upon request.

